

**Allotment Evaluation (AE)  
For  
Eighty Four (#734)**

Permittee		<u>Authorization Number</u> 3001410																		
Livestock Use	Preference AUMs	<u>Allotment</u> 00734	<u>Active</u> 37	<u>Suspended</u> 0																
	Period of Use	<u>Allotment</u> Eight Four	<u>Kind</u> 3 Cattle	<u>Season of Use</u> 03/01 – 02/28																
	Kind of Livestock	Cow Calf																		
	Percent Public Land	AUMs are authorized at 100% public land																		
Allotment Profile	Physical Description	<p>Allotment 734 is located approximately 17 miles southeast of Romeroville in San Miguel County, New Mexico. Elevation on this allotment is roughly between 5,700 and 5,900 feet. Landforms on the allotment include; drainages and mesa.</p> <p>One soil type is identified within the BLM parcels. Soils within the parcels are:</p> <p>Tuloso-Sombordoro-Rock outcrop complex moderately sloping. These soils consist of stony sandy and stony loams with rooting depths ranging from 8 to 20 inches. Parent materials are primarily derived from sandstone. Average annual precipitation is about 16 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by pinyon, juniper, blue grama, hairy grama, sideoats grama, and pinyon ricegrass.</p>																		
	Land Status Acreage	<u>BLM</u> 192	<u>State</u> 0	<u>Private</u> 0																
	Management Objectives	The allotment is under a ‘Custodial’ (‘C’) management category. ‘C’ category allotments have evidence of a “not apparent” to “upward” long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production.																		
	Key Forage Species	blue grama, hairy grama, sideoats grama, and pinyon ricegrass																		
	Grazing System	Rotational grazing with private lands																		
Management Evaluation	Actual Use	<p>Actual use reports were not submitted. Use was determined by billed AUMs.</p> <table><thead><tr><th><u>AUMs</u></th><th><u>Year</u></th></tr></thead><tbody><tr><td>36</td><td>2009</td></tr><tr><td>36</td><td>2008</td></tr><tr><td>36</td><td>2007</td></tr><tr><td>36</td><td>2006</td></tr><tr><td>36</td><td>2005</td></tr><tr><td>36</td><td>2004</td></tr><tr><td>36</td><td>2003</td></tr></tbody></table>			<u>AUMs</u>	<u>Year</u>	36	2009	36	2008	36	2007	36	2006	36	2005	36	2004	36	2003
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	Utilization	Due to the lack of staff utilization studies have not been conducted. During the assessment visit it was determined that the allotment was receiving slight to moderate amounts of utilization.
	Climate	<p>The past water year (Oct. 1, 2008 – Sept. 30, 2009) the average temperature has been slightly above average (0 to 1 degrees Fahrenheit above average) and precipitation below average (4 to 6 inches below average). The winter was slightly drier (.75 to 1.5 inches below normal) and was warmer (1 to 2 degrees Fahrenheit above average). The spring was drier (1 to 1.5 inches below normal) and was warmer (0 to 2 degrees Fahrenheit above average). This should provide below average plant growth for cool season plants. The summer precipitation was below average (1.5 to 3 below normal) and slightly warmer (0 to 1 above normal) which should provide below normal growth for warm season plants.</p> <p>Climate change is a concern not only in New Mexico but globally. “Effects of increasing atmospheric CO<sub>2</sub> levels on plants are predicted to cause dramatic changes in native vegetation. Global climate change may accelerate rates of plant extinction, while ecosystem structure and function may shift. Ecological response to global changes in climate could shift ecosystems (i.e., shrublands replacing grasslands) and have effects, not only to an individual species, but to the ecosystem itself by additions and deletions of vegetation species” (Johnson, H.B., and H.S. Mayeux. 1992. Viewpoint: A view on species additions and deletions and the balance of nature. Journal of Wildlife Management 45:322-333.)</p> <p>We anticipate that our monitoring efforts will help indicate vegetation shifts, allowing for management modifications to address global climate change.</p>
	Trend	<p>No long term trend plots have been established on this allotment.</p> <p>A Rangeland Health Matrix was completed on April, 10 2009. The actual survey forms are available within the allotment file. Below is a summation of the information gathered by the survey. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated</p>

		<p>none to slight (best condition), the equation would be <math>5(\text{score}) \cdot 10 \text{ indicators} = 50/50 \cdot 100 = 100\%</math> similarity, or what is expected based on an Ecological Site Description. Standards for each individual category are met when they are rated Proper Functioning Condition or Functioning at Risk-Upward Trend. Not meeting standards are ratings of; Functioning at Risk-Static, Functioning at Risk-Downward Trend and Non Functional.</p> <p><b>Soil and Site Stability</b> One indicator was deemed None to Slight, eight were deemed Slight to Moderate and one was deemed Moderate. Rating: 80%</p> <p><b>Hydrologic Function</b> Two indicators were deemed None to Slight, seven were deemed Slight to Moderate and one was deemed Moderate. Rating: 82%</p> <p><b>Biotic Integrity</b> Five indicators were deemed None to Slight and four were deemed Slight to Moderate. Rating: 91%</p> <p><b>Overall Rating: 84%</b></p> <p>Soils were rated at Proper Functioning Condition, Flora was rated at Proper Functioning Condition, and Biotic Fauna was rated at Proper Functioning Condition.</p> <p>Current livestock use does not appear to be having an adverse affect on rangeland health.</p>
	<b>Riparian</b>	There is no riparian vegetation found on this allotment.
	<b>Wildlife</b>	<p>Seasonal home ranges in the allotment include those for elk, deer, bear, cougar, bobcat, fox, coyote, small mammals, bats, raptors, turkey vulture, songbirds, and a variety of insects.</p> <p>Elk and deer are grazers; however there is little dietary overlap between deer and cattle. Best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.</p> <p>Critical wildlife areas on the allotment include winter range for elk. An important migratory corridor for avian and big-game species also occurs inside the allotment boundaries.</p>
	<b>Threatened and Endangered Species</b>	It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.

		Special status species that are likely to be found on the allotment include bald eagle and ferruginous hawk.
Conclusions and Recommendations		Overall, the allotment is in good condition with good diversity. The only concern on the allotment is the encroachment of piñon and juniper. Monitoring will help establish true trend data and any possible changes in the future. It is recommended that grazing be renewed for another 10 years without any changes to the permit.



